

CLAIMS

What is claimed is:

1. A spread spectrum communication system comprising:
 - means for producing a reference signal;
 - means for producing a plurality of message signals, each message signal having message data;
 - means for combining the reference signal and the plurality of message signals as a combined signal;
 - means for transmitting the combined signal as a combined spread spectrum signal;
 - means for receiving the combined spread spectrum signal;
 - means for detecting the reference signal within the received combined spread spectrum signal; and
 - means for recovering the message data of the plurality of message signals using the reference signal.
2. The system of claim 1 further comprising:
 - means for recovering a carrier signal from the combined spread spectrum signal using the reference signal; and
 - wherein the message data recovering means uses the recovered carrier signal to recover the message data.

3. The system of claim 1 wherein the combined spread spectrum signal is in a code division multiple access format.

4. The system of claim 1 wherein a base station transmits the combined spread spectrum signal and a mobile station receives the combined spread spectrum signal.

5. A method for use in a spread spectrum communication system, the method comprising:

producing a reference signal;

producing a plurality of message signals, each message signal having message data;

combining the reference signal and the plurality of message signals as a combined signal;

transmitting the combined signal as a combined spread spectrum signal;

receiving the combined spread spectrum signal;

detecting the reference signal within the received combined spread spectrum signal

and

recovering the message data of the plurality of message signals using the reference signal.

6. The method of claim 5 wherein the combined spread spectrum signal is in a code division multiple access format.

7. The method of claim 5 wherein a base station transmits the combined spread spectrum signal and a mobile station receives the combined spread spectrum signal.

8. The method of claim 5 further comprising:
recovering a carrier signal from the combined spread spectrum signal using the reference signal; and

wherein the message data recovering means uses the recovered carrier signal to recover the message data.